Fig. 1

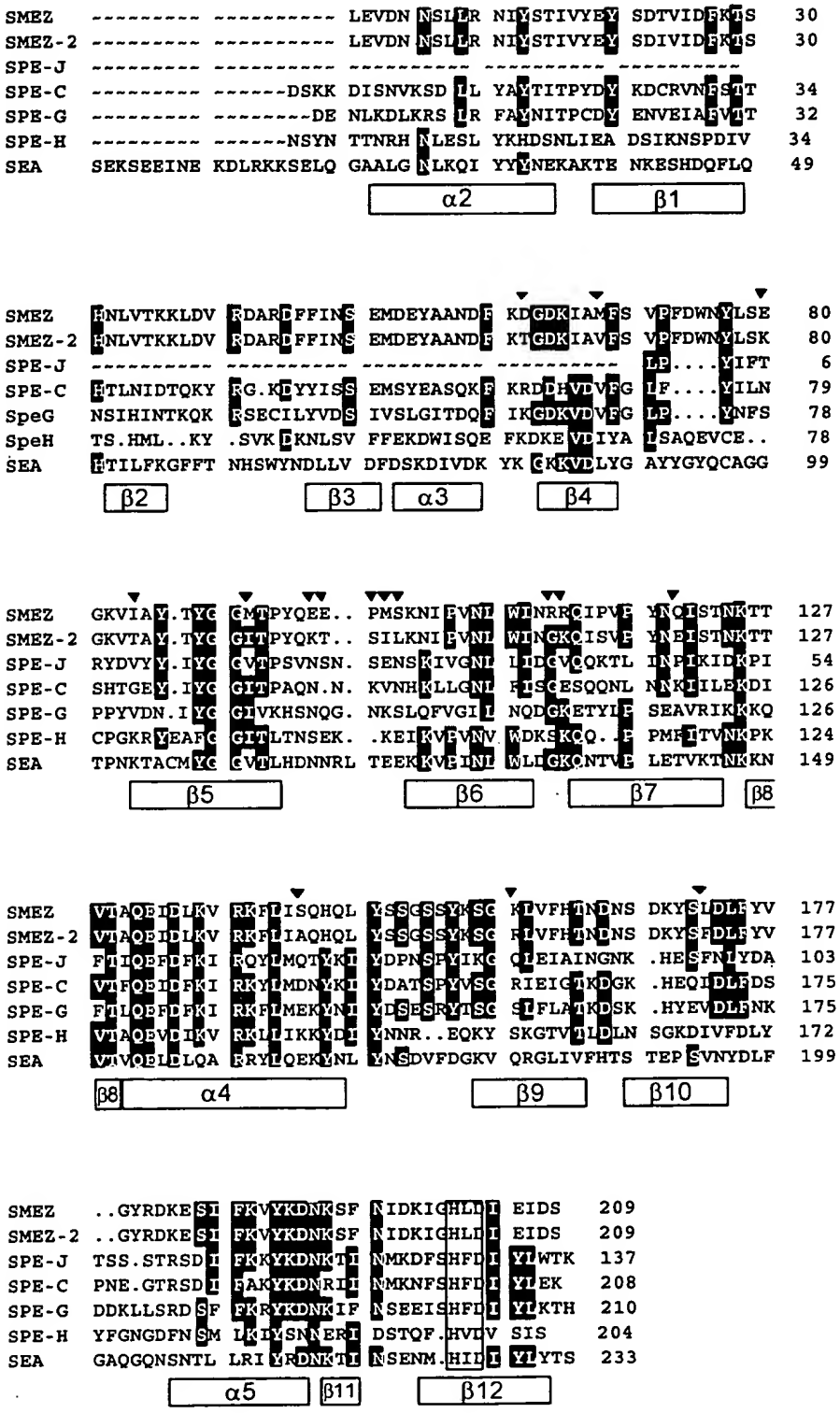

FIG 2

```
          10                  30                  50
          .                   .                   .
ATGAAAAAAACAAAACTTATTTTTTCTTTTACTTCAATATTCATTGCAATAATTTCTCGT
M  K  K  T  K  L  I  F  S  F  T  S  I  F  I  A  I  I  S  R

          70                  90                  110
          .                   .                   .
CCTGTGTTTGGATTAGAAGTAGATAATAATTCCCTTCTAAGGAATATCTATAGTACGATT
P  V  F  G  L  E  V  D  N  N  S  L  L  R  N  I  Y  S  T  I

          130                 150                 170
          .                   .                   .
GTATATGAATATTCAGATATAGTAATTGATTTTAAAACCAGTCATAACTTAGTGACTAAG
V  Y  E  Y  S  D  I  V  I  D  F  K  T  S  H  N  L  V  T  K

          190                 210                 230
          .                   .                   .
AAACTTGATGTTAGAGATGCTAGAGATTTCTTTATTAACTCCGAAATGGACGAATATGCA
K  L  D  V  R  D  A  R  D  F  F  I  N  S  E  M  D  E  Y  A

          250                 270                 290
          .                   .                   .
GCCAATGATTTTAAAACTGGAGATAAAATAGCTGTGTTCTCCGTCCCATTTGATTGGAAC
A  N  D  F  K  T  G  D  K  I  A  V  F  S  V  P  F  D  W  N

          310                 330                 350
          .                   .                   .
TATTTATCAAAAGGAAAAGTCACAGCATATACCTATGGTGGAATAACACCCTACCAAAAA
Y  L  S  K  G  K  V  T  A  Y  T  Y  G  G  I  T  P  Y  Q  K

          370                 390                 410
          .                   .                   .
ACTTCAATACCTAAAAAtatCCCTGTTAATTTATGGattaatGgAAAGcagatCTCTgtT
T  S  I  P  K  N  I  P  V  N  L  W  I  N  G  K  Q  I  S  V

          430                 450                 470
          .                   .                   .
CcTtaCaaCGAAATATCaaCTAACAAAACAacaGTTACAGCTCAAGAAAttgATCTAAAG
P  Y  N  E  I  S  T  N  K  T  T  V  T  A  Q  E  I  D  L  K

          490                 510                 530
          .                   .                   .
GTTAGAAAATTTTTAATAGCACAACATCAATTATATTCTTCTGGTTCTAGCTACAAAAGT
V  R  K  F  L  I  A  Q  H  Q  L  Y  S  S  G  S  S  Y  K  S

          550                 570                 590
          .                   .                   .
GGTAGACTGGTTTTTCATACAAATGATAATTCAGATAAATATTCTTTCgatcTTTTctat
G  R  L  V  F  H  T  N  D  N  S  D  K  Y  S  F  D  L  F  Y

          610                 630                 650
          .                   .                   .
gtagGATATAGAGATAAAGAAAGTATCTTTAAAGTATACAAAGACAATAAATCTTTCAAT
V  G  Y  R  D  K  E  S  I  F  K  V  Y  K  D  N  K  S  F  N

          670                 690
          .                   .
ATAGATAAAATTGGGCATTTAGATATAGAAATTGACTCCTAA
I  D  K  I  G  H  L  D  I  E  I  D  S  *
```

SPE-G

FIG 3

```
          10                  30                  50
          .                   .                   .
ATGAAAACAAACATTTTGACAATTATCATATTATCATGTGTTTTTAGCTATGGAAGTCAA
M  K  T  N  I  L  T  I  I  I  L  S  C  V  F  S  Y  G  S  Q

          70                  90                  110
          .                   .                   .
TTAGCTTATGCAGATGAAAATTTAAAAGATTTAAAAAGAAGTTTAAGATTTGCCTATAAT
L  A  Y  A  D  E  N  L  K  D  L  K  R  S  L  R  F  A  Y  N

          130                 150                 170
          .                   .                   .
ATTACCCCATGCGATTATGAAAATGTAGAAATTGCATTTGTTACTACAAATAGCATACAT
I  T  P  C  D  Y  E  N  V  E  I  A  F  V  T  T  N  S  I  H

          190                 210                 230
          .                   .                   .
ATTAATACTAAACAAAAAAGATCGGAATGTATTCTTTATGTTGATTCTATTGTATCTTTA
I  N  T  K  Q  K  R  S  E  C  I  L  Y  V  D  S  I  V  S  L

          250                 270                 290
          .                   .                   .
GGCATTACTGATCAGTTTATAAAAGGGGATAAGGTCGATGTTTTTGGTCTCCCTTATAAT
G  I  T  D  Q  F  I  K  G  D  K  V  D  V  F  G  L  P  Y  N

          310                 330                 350
          .                   .                   .
TTTTCCCCACCTTATGTAGATAATATTTATGGTGGTATTGTAAAACATTCGAATCAAGGA
F  S  P  P  Y  V  D  N  I  Y  G  G  I  V  K  H  S  N  Q  G

          370                 390                 410
          .                   .                   .
AATAAATCATTACAGTTTGTAGGAATTTTAAATCAAGATGGGAAAGAAACTTATTTGCCC
N  K  S  L  Q  F  V  G  I  L  N  Q  D  G  K  E  T  Y  L  P

          430                 450                 470
          .                   .                   .
TctgAGGCTGTTCGCATAAAAAAGAAACAGTTTACTTTACAGGAATttgATTTTAAAATA
S  E  A  V  R  I  K  K  K  Q  F  T  L  Q  E  F  D  F  K  I

          490                 510                 530
          .                   .                   .
AGAAAATTTCTAATGGAAAAATACAATATCTATGATTCGGAATCGCGTTATACATCGGGG
R  K  F  L  M  E  K  Y  N  I  Y  D  S  E  S  R  Y  T  S  G

          550                 570                 590
          .                   .                   .
AGCCTTTTCCTTGCTACTAAAGATAGTAAACATTATGAAGTTGATTTATTTAATAAGGAT
S  L  F  L  A  T  K  D  S  K  H  Y  E  V  D  L  F  N  K  D

          610                 630                 650
          .                   .                   .
GATAAGCTTTTAAGTCGAGACAGTTTCTTTAAAAGGTATAAAGATAATAAGATTTTTAAT
D  K  L  L  S  R  D  S  F  F  K  R  Y  K  D  N  K  I  F  N

          670                 690
          .                   .
AGTGAAGAAATTAGTCATTTTGATATCTACTTAAAAACGCACTAG
S  E  E  I  S  H  F  D  I  Y  L  K  T  H  *
```

SPE-H

FIG 4

```
        10                  30                  50
        .                   .                   .
ATGAGATATAATTGTCGCTACTCACATATTGATAAGAAAATCTACAGCATGATTATATGT
M  R  Y  N  C  R  Y  S  H  I  D  K  K  I  Y  S  M  I  I  C

        70                  90                  110
        .                   .                   .
TTGTCATTTCTTTTATATTCCAATGTTGTTCAAGCAAATTCTTATAATACAACCAATAGA
L  S  F  L  L  Y  S  N  V  V  Q  A  N  S  Y  N  T  T  N  R

        130                 150                 170
        .                   .                   .
CATAATCTAGAATCGCTTTATAAGCATGATTCTAACTTGATTGAAGCCGATAGTATAAAA
H  N  L  E  S  L  Y  K  H  D  S  N  L  I  E  A  D  S  I  K

        190                 210                 230
        .                   .                   .
AATTCTCCAGATATTGTAACAAGCCATATGTTGAAATATAGTGTCAAGGATAAAAATTTG
N  S  P  D  I  V  T  S  H  M  L  K  Y  S  V  K  D  K  N  L

        250                 270                 290
        .                   .                   .
TCAGTTTTTTTTGAGAAAGATTGGATATCACAGGAATTCAAAGATAAAGAAGTAGATATT
S  V  F  F  E  K  D  W  I  S  Q  E  F  K  D  K  E  V  D  I

        310                 330                 350
        .                   .                   .
TATGCTCTATCTGCACAAGAGGTTTGTGAATGTCCAGGGAAAAGGTATGAAGCGTTtggt
Y  A  L  S  A  Q  E  V  C  E  C  P  G  K  R  Y  E  A  F  G

        370                 390                 410
        .                   .                   .
GGAATTACATTAACTAATTCAGAAAAAAAAAGAAATTAAAGTTCCTGTAAACGtgtGggat
G  I  T  L  T  N  S  E  K  K  E  I  K  V  P  V  N  V  W  D

        430                 450                 470
        .                   .                   .
AAAAGTAAACAACAGCCGCCTATGTTTATTACAGTCAATAAACCGAAagtaaCCGCTCAG
K  S  K  Q  Q  P  P  M  F  I  T  V  N  K  P  K  V  T  A  Q

        490                 510                 530
        .                   .                   .
GAAGTGGATATAAAAGTTAGAAAGTTATTGAttaagaaatacgATATCTATAATAaccgg
E  V  D  I  K  V  R  K  L  L  I  K  K  Y  D  I  Y  N  N  R

        550                 570                 590
        .                   .                   .
gaacaaaaatactctaaaggaactgttaccttagATTTAAATTCAGGTAAAGATATTGTT
E  Q  K  Y  S  K  G  T  V  T  L  D  L  N  S  G  K  D  I  V

        610                 630                 650
        .                   .                   .
TTTGATTTGTATTATTTTGGCAATGGAGACTTTAATAGCATGCTAAAAATATATTCCAAT
F  D  L  Y  Y  F  G  N  G  D  F  N  S  M  L  K  I  Y  S  N

        670                 690                 710
        .                   .                   .
AACGAGAGAATAGactcaactCAATTTCATGTAGatgTGTCaatcagctaA
N  E  R  I  D  S  T  Q  F  H  V  D  V  S  I  S  *
```

SPE-J (partial)

FIG 5

```
          10                  30                  50
          .                   .                   .
CTTCCGTACATATTTACTCGTTATGATGTTTATTATATATATGGTGGGGTTACACCATCA
L  P  Y  I  F  T  R  Y  D  V  Y  Y  I  Y  G  G  V  T  P  S

          70                  90                  110
          .                   .                   .
GTAAACAGTAATTCGGAAAATAGTAAAATTGTAGGTAATTTACTAATAGATGGAGTCCAG
V  N  S  N  S  E  N  S  K  I  V  G  N  L  L  I  D  G  V  Q

          130                 150                 170
          .                   .                   .
CAAAAAACACTAATAAATCCCATAAAAATAGATAAACCTATTTTTACGATTCAAGAATTT
Q  K  T  L  I  N  P  I  K  I  D  K  P  I  F  T  I  Q  E  F

          190                 210                 230
          .                   .                   .
GACTTCAAAATCAGACAATATCTTATGCAAACATACAAAATTTATGATCCTAATTCTCCA
D  F  K  I  R  Q  Y  L  M  Q  T  Y  K  I  Y  D  P  N  S  P

          250                 270                 290
          .                   .                   .
TACATAAAAGGGCAATTAGAAATTGCGATCAATGGcaATAAACATGAAAGTTTTAACTTA
Y  I  K  G  Q  L  E  I  A  I  N  G  N  K  H  E  S  F  N  L

          310                 330                 350
          .                   .                   .
TATGATGCAACCTCATCTAGTACAAGGAGTGATATTTTTAAAAAATATAAAGACaATAAG
Y  D  A  T  S  S  S  T  R  S  D  I  F  K  K  Y  K  D  N  K

          370                 390                 410
          .                   .                   .
ACTATAAATATGAAAGATTTCAGCCATTTTGATATTTACCTTtggACTAAATAA
T  I  N  M  K  D  F  S  H  F  D  I  Y  L  W  T  K  *
```

FIG 6

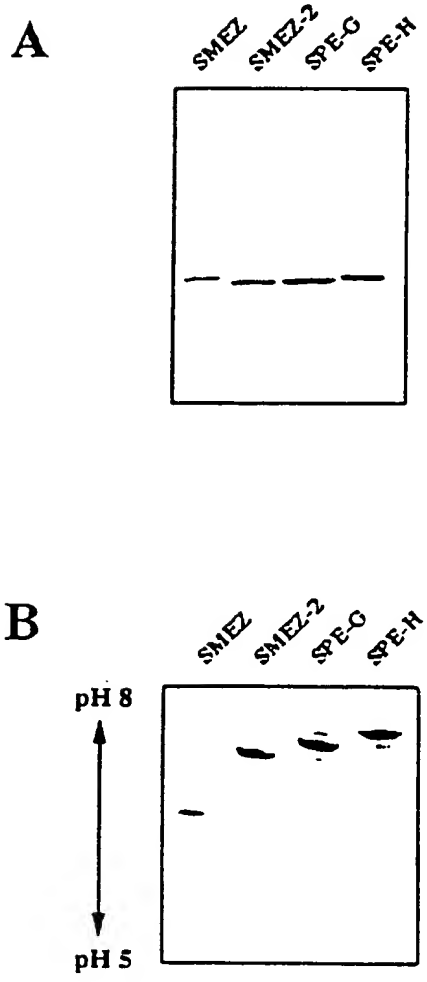

FIG 7

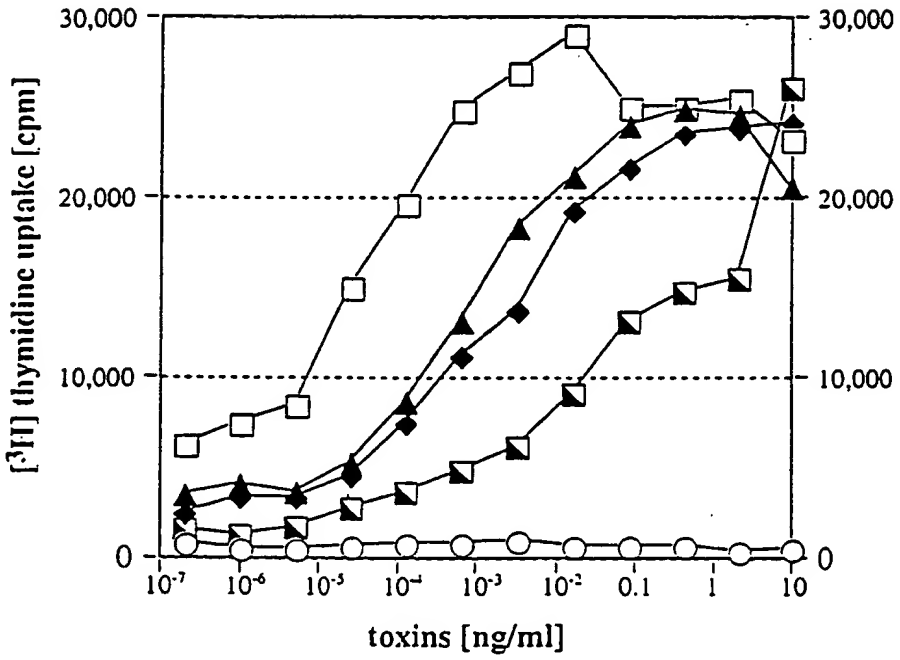

FIG 8

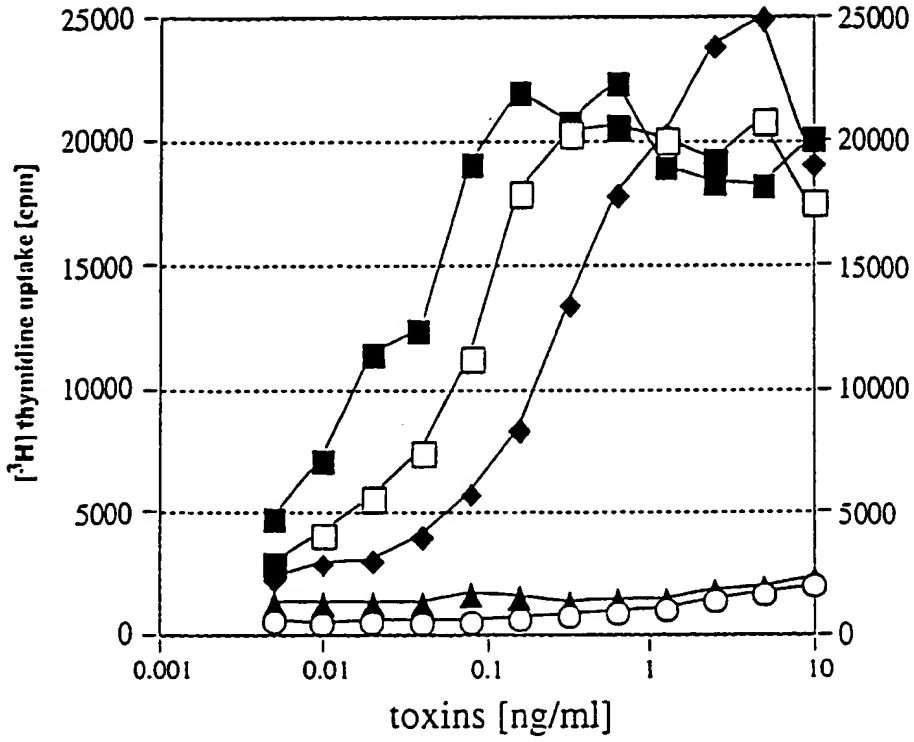

FIG 9

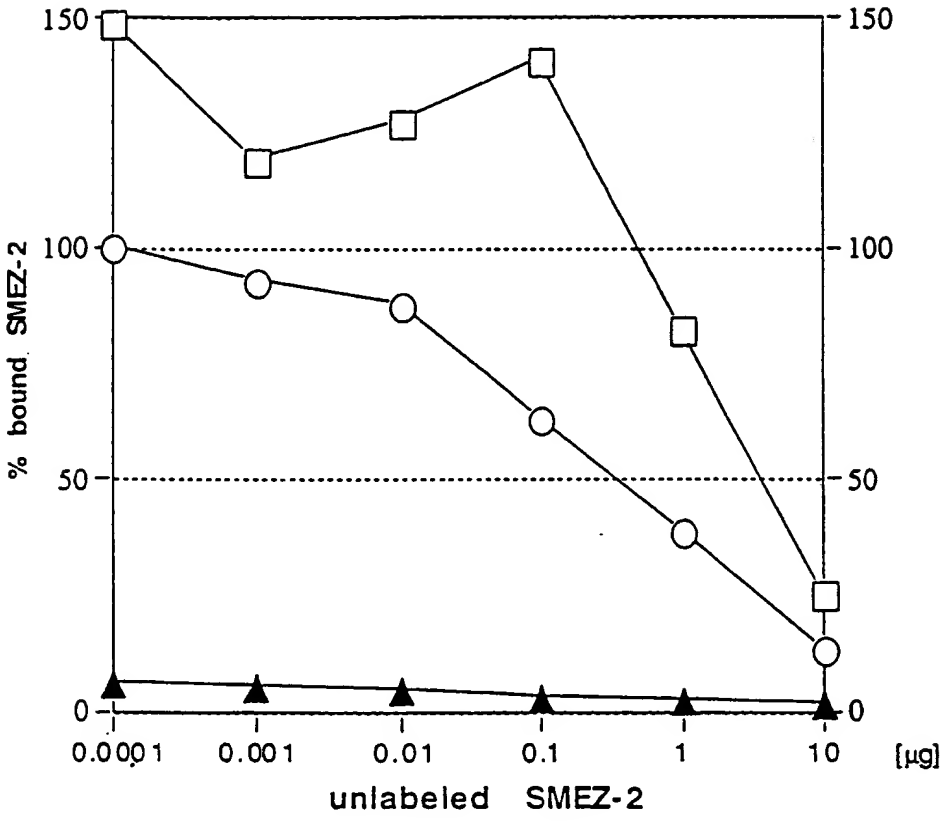

FIG 10

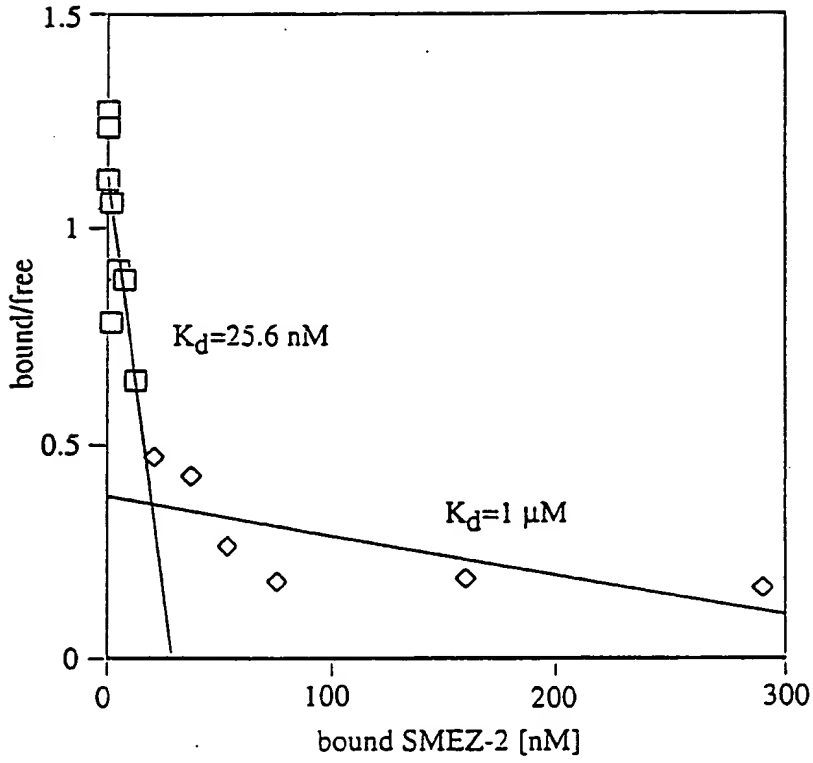

Fig. 11

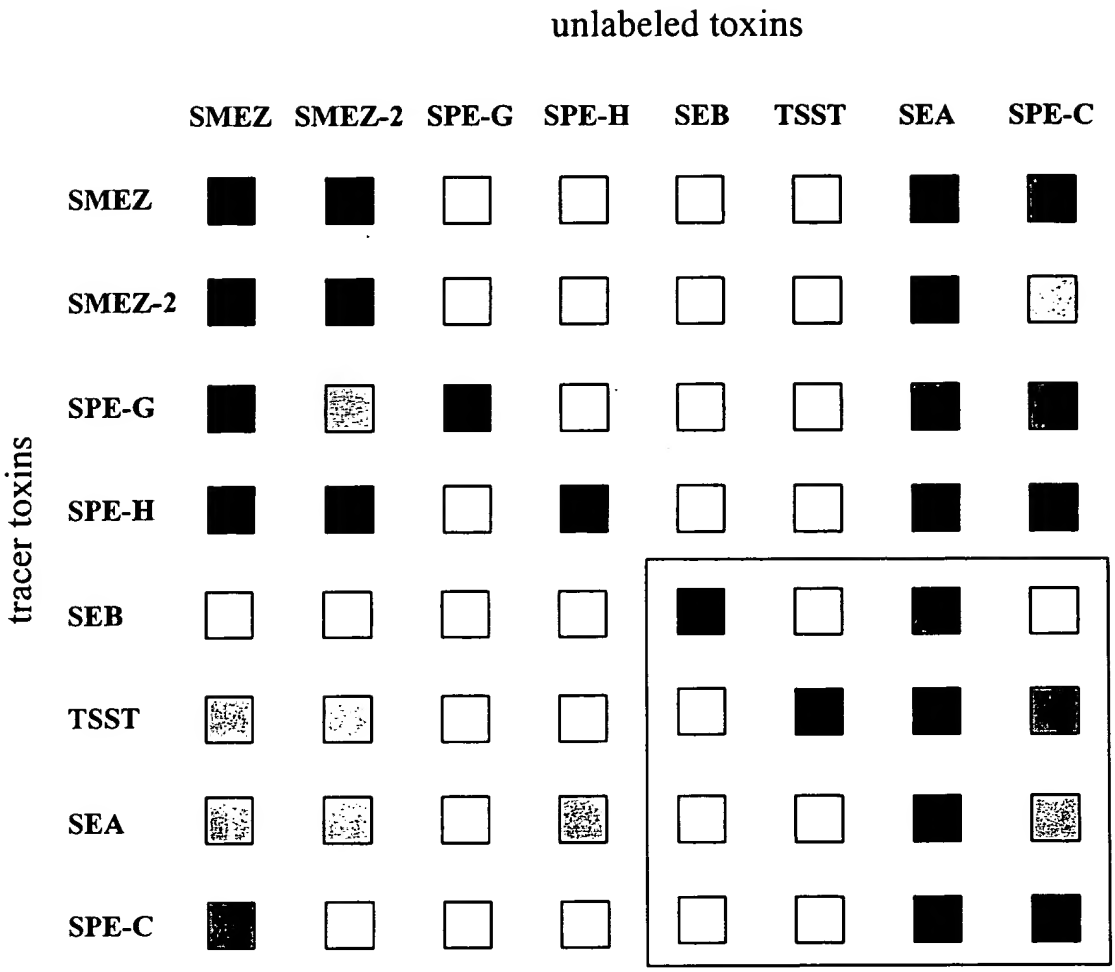

FIG 12

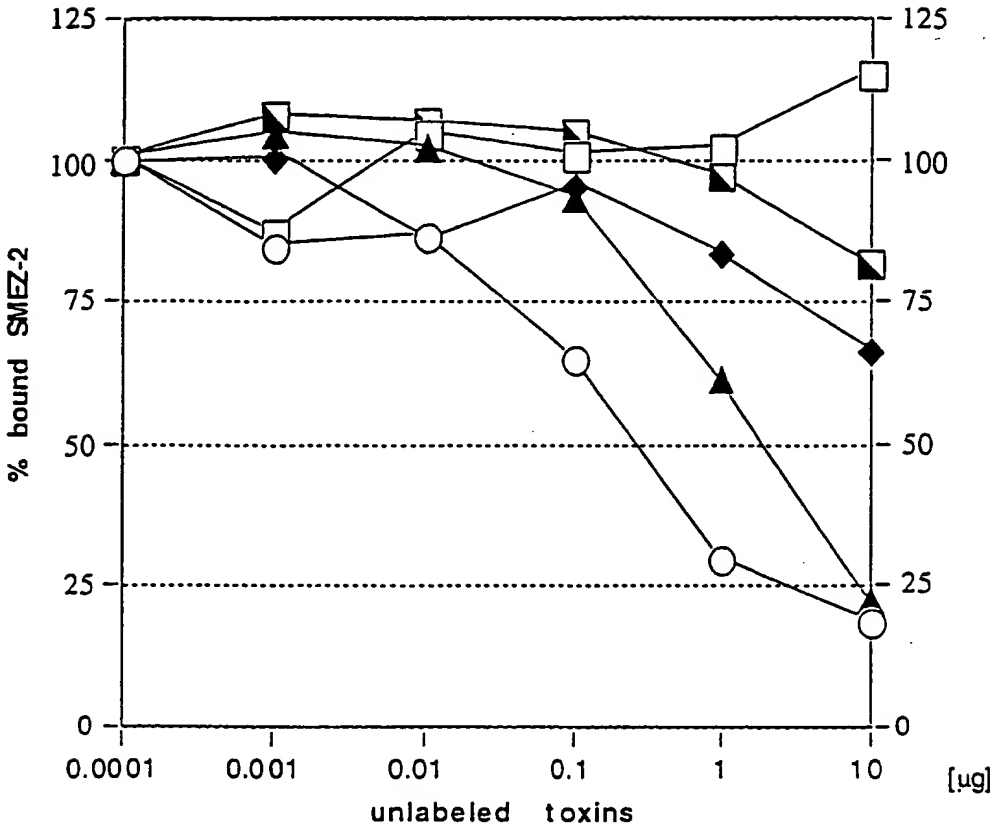

FIG 13